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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte KEVIN L. PARSONS

Appeal 2009-004624
Application 10/625,020
Technology Center 3700

Decided: January 12, 2010

Before LINDA E. HORNER, JOHN C. KERINS and
STEVEN D.A. McCARTHY, *Administrative Patent Judges*.

McCARTHY, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

1
2 The Appellant appeals under 35 U.S.C. § 134 from the Examiner's
3 decision finally rejecting claims 55, 56, 59-61 and 64-73 under 35 U.S.C.
4 § 112, second paragraph, as being indefinite; and finally rejecting claims 75-
5 79, 81-91 and 96-102 under 35 U.S.C. § 103(a) as being unpatentable over

DeLucia (US 3,776,429, issued Dec. 4, 1973) and Parsons (US 6,283,609 B1, issued Sep. 4, 2001). The Examiner objects to claims 57, 58, 62, 63, 80 and 92-95. We have jurisdiction under 35 U.S.C. § 6(b).

We sustain the rejections of claims 75-77, 83 and 87-90. We do not sustain the rejections of any of the remaining claims.

Claims 55, 75 and 91 are independent. Claim 55 recites:

55. A tactical defense device for dispersing a chemical from a pressurized spray cartridge, comprising:

a dispenser adapted to receive the pressurized spray cartridge;

the dispenser having a first end defining a forward portion and an opposite second end;

the forward portion having a discharge orifice for dispersing the chemical through the discharge orifice in a generally axial direction relative to a longitudinal axis of the dispenser;

an actuator for movement in a generally axial direction relative to the longitudinal axis, between a normally inactivated position and an activated position for dispersing the chemical;

an expandable baton portion adapted for connection to the second end;

a cap accessible on a side surface of the dispenser;

the cap movable between first and second positions;

1 wherein, in the first position, the cap may be
2 depressed in a generally radial direction relative to
3 the longitudinal axis mechanically causing the
4 actuator movement, with movement of the cap
5 between the first and second positions being in a
6 direction that is different than the generally radial
7 direction;

8 wherein depression of the cap is prevented
9 when the cap is in the second position; and

10 wherein the device is generally cylindrical
11 about the longitudinal axis.

12
13 The Appellant's Specification discloses an embodiment *10* of a
14 tactical defense device in accordance with claim 55. The embodiment *10*
15 includes a dispenser *14* connected to an expandable baton portion *12* by a
16 connector coupling *16*. (*See Spec.* 5-6, paras. 0039-40.) The dispenser *14*
17 includes a pressurized spray cartridge *40*. The spray cartridge *40* of the
18 embodiment *10* has a discharge nozzle *42* aligned with a discharge orifice *62*
19 through a nozzle plate *50*. The spray cartridge *40* releases its pressurized
20 contents through the discharge orifice *62* when the discharge nozzle *42* is
21 depressed axially into the cartridge. (*Spec.* 7, paras. 0044-45 and 8, para.
22 0047.) In other words, the spray cartridge *40* releases its pressurized
23 contents when the cartridge is pressed axially forwardly and the reaction
24 force exerted by the nozzle plate *50* presses the nozzle *42* into the cartridge.

25 The connector coupling *16* of the embodiment *10* houses a switching
26 mechanism *13* for pressing the spray cartridge *40* forwardly to release the
27 contents of the cartridge. (*See Spec.* 5, para. 0039.) The switching
28 mechanism includes a safety slide button *80* with a cap portion *98*; an
29 actuator button *78*; and a plunger actuator *72*. (*Spec.* 9, para. 0052 and 10,

1 para. 0054.) The actuator button 78 is mounted on a vertical guide pin 74 so
2 as to restrain the actuator button 78 to move only in a radial direction.

3 The actuator button 78 and the plunger actuator 72 have cooperating
4 beveled surfaces 78c, 72c. By means of these beveled surfaces 78c, 72c, the
5 actuator button 78 and the plunger actuator 72 convert radial force applied to
6 the actuator button 78 into an axial force. The plunger actuator 72 applies
7 the axial force to the spray cartridge 40 to release the pressurized contents of
8 the cartridge. (Spec. 9, para. 0052.) The cap portion 98 of the embodiment
9 10 does not apply any force directly to either the plunger actuator 72 or the
10 spray cartridge 40.

11 12 ISSUES

13 The Examiner concludes that claim 55 and its dependent claims 56,
14 59-61 and 64-73 are indefinite because the claims fail to recite an actuating
15 button for transferring force from the cap to the actuator. The Examiner
16 finds that the Appellant has not disclosed an embodiment operable without
17 an actuator button. (Ans. 7-8.) The Examiner concludes that claims 55, 56,
18 59-61 and 64-73 are ambiguous because one of ordinary skill in the art
19 would be unable to determine what additional structure must be read into the
20 claim in order to render the claimed device operable. (Ans. 8-9.) The
21 Appellant disagrees. (Reply Br. 2.)

22 The Appellant does not present any arguments which might suggest
23 that any of dependent claims 76, 77, 79, 83 and 87-90 might be patentable
24 over DeLucia and Parsons if independent claim 75 is not. (*See* App. Br. 9.¹)

¹ The Appellant does not separately argue claim 82, either. (*See* App. Br. 9.) Nevertheless, claim 82 recites “a nozzle plate supported within the

Therefore, the Appellant has grouped claims 75-77, 79, 83 and 87-90.
Claim 75 is representative of the group. *See* 37 C.F.R. § 41.37(c)(1)(vii).

The Examiner finds that DeLucia discloses a slidingly insertable sleeve for holding a pressurized spray cartridge (Ans. 5 and 9), as recited in independent claim 75; a guide pin for guiding movement of an actuator button caused by depression of the actuator button in a generally radial direction (Ans. 6), as recited in claim 78; and a nozzle plate which is supported within the forward portion of the dispenser and which defines a discharge orifice (Ans. 10), as recited in independent claim 91 as well as in claims 81, 82, 84 and 85. The Appellant disagrees. (*See generally* App. Br. 9-14; Reply Br. 4-6.) The Examiner articulates no reasoning independent of these findings which might explain why a tactical defense device having these features would have been obvious from the combined teachings of DeLucia and Parsons.

This appeal turns on four issues:

Has the Appellant shown that the Examiner erred in concluding that claim 55 fails to particularly point out and distinctly claim the subject matter which the Appellant regards as the invention?

Has the Appellant shown that the Examiner erred in finding that DeLucia discloses a slidingly insertable sleeve for holding a pressurized spray cartridge as recited in claim 75?

forward portion and defining the discharge orifice.” The Appellant argues that similar language distinguishes the subject matter of claims 81, 84, 85 and 91 from the combined teachings of DeLucia and Parsons. For this reason, claim 82 will not be grouped with claim 75 for purposes of this appeal.

Has the Appellant shown that the Examiner erred in finding that DeLucia discloses a guide pin for guiding movement of an actuator button caused by depression of the actuator button in a generally radial direction as recited in claim 78?

Has the Appellant shown that the Examiner erred in finding that DeLucia discloses a nozzle plate which is supported within the forward portion of the dispenser and which defines a discharge orifice as recited in claims 81, 82, 84, 85 and 91?

FINDINGS OF FACT

The record supports the following findings of fact (“FF”) by a preponderance of the evidence.

1. DeLucia describes a combination flashlight and protective device 10 including a housing 12. (DeLucia, col. 2, ll. 14-20.) The housing 12 includes an elongated tubular portion 14 and an enlarged head portion 17. (DeLucia, col. 2, ll. 21-29.)

2. The elongated tubular portion 14 of the housing 12 of DeLucia's device 10 encloses a propellant capsule or spray cartridge 44. (DeLucia, col. 2, ll. 40-42.)

3. DeLucia's propellant capsule 44 is longitudinally slidable within a sleeve 46. (*Id.*)

4. DeLucia's sleeve 46 is riveted to the housing 14 after the sleeve is inserted into the housing. (*Id.*)

5. Figure 1 of DeLucia depicts the elongated tubular portion 14 as being cylindrical in shape. Figure 1 depicts the elongated tubular section 14 as being open at its forward end.

6. Figure 1 of DeLucia depicts the sleeve 46 as being cylindrical in shape, with an outer diameter smaller than the inner diameter of the elongated tubular portion 14.

7. As such, DeLucia's sleeve 46 is configured so as to be susceptible of insertion into the elongated tubular portion 14 by introducing the sleeve 46 and a retainer 72 through the opening at the front end of the elongated tubular portion 14 and then sliding the sleeve 46 and the retainer 72 along an upper portion of the inner surface of the elongated tubular portion 14 until the sleeve 46 is positioned for riveting.

8. DeLucia's propellant capsule 44 includes neck 56. A wall 60 positioned near the forward end of the elongated tubular portion 14 mounts a cap 58 for engaging the neck 56 of the propellant capsule 44. The cap 58 includes an axially extending, rigidly fixed tube 62 positioned to open an internal valve in the propellant capsule 44. When the propellant capsule 44 slides forwardly in the sleeve 46, the rigid tube 62 actuates the internal valve to discharge the propellant from the propellant capsule 44. (DeLucia, col. 2, ll. 49-64.)

9. A discharge tube 68 defining an orifice 66 is snap-fitted into a receptacle 70. (DeLucia, col. 2, ll. 66-68.)

10. A flexible tube 64 conducts propellant discharged from the propellant capsule 44 to the discharge tube 68 for discharge through the orifice 66. (DeLucia, col. 2, ll. 57-64.)

11. A removable retainer 24 positions a lens 25 at the front end of the enlarged head portion 17. (DeLucia, col. 2, ll. 21-29.)

12. Figure 1 of DeLucia depicts the receptacle 70 as positioning the discharge tube 68 defining the orifice 66 radially outwardly from the lens 25.

13. DeLucia describes vertically disposing a push button 122 formed from a translucent red plastic material on a switch housing 92 mounted on the elongated tubular portion 14. (DeLucia, col. 3, ll. 54-60, col. 4, ll. 30-33 and fig. 1.)

14. DeLucia also describes vertically disposing a plunger 124 with an enlarged head portion 126 through the housing of the elongated tubular portion 14. (DeLucia, col. 4, ll. 9-14.)

15. Figure 1 of DeLucia depicts the push button 122 as being vertically aligned with the enlarged head portion 126 of the plunger 124. A slide block 130 fixed to the radially inward end of the plunger 124 has an inclined cam surface 132 in sliding engagement with a complementary cam surface 134 of a fixed block 136. (DeLucia, col. 4, ll. 9-18.) When a leaf spring 104 interposed between the push button 122 and the plunger 124 is correctly positioned and the push button 122 is depressed radially inwardly, sliding engagement between an inclined cam surface 132 of a slide block 130 fixed to the radially inward end of the plunger 124 and a complementary cam surface 134 of a fixed block 136 causes forward movement of the propellant capsule 44 so as to discharge the propellant from the capsule 44. (See DeLucia, col. 4, ll. 19-26.)

16. DeLucia discloses providing an optic rod 138 extending upwardly through the plunger 124 for illuminating the push button 122. (DeLucia, col. 4, ll. 30-33 and 36-40.)

1 17. Figures 1 and 2 of DeLucia depict the push button 122 as not
2 directly contacting either the plunger 124 or the optic rod 138. Instead, a
3 lower surface of the push button 122 appears to abut a flat upper surface of
4 the leaf spring 104 and a flat lower surface of the leaf spring 104 appears to
5 abut upper surfaces of the plunger 124 and the optic rod 138.

6 18. Neither the plunger 124 nor the optic rod 138 appears to guide
7 the movement of the push button 122 in a generally radial direction.

8 19. Parsons discloses a flashlight 10 including a flashlight body 20
9 and an endcap 402 which functions as an adapter for securing the flashlight
10 10 to another implement such as an expandable baton 60. (Parsons, col. 8,
11 ll. 3-6; col. 10, ll. 1-3; col. 12, ll. 4-6 and 51-60.) Parsons does not disclose
12 structure for discharging a spray from a spray capsule.

13 14 PRINCIPLES OF LAW

15 A claim under examination is given its broadest reasonable
16 interpretation consistent with the underlying specification. *In re Am. Acad.*
17 *of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). In the absence of
18 an express definition of a claim term in the specification or a clear
19 disclaimer of scope, the claim term is interpreted as broadly as the ordinary
20 usage of the term by one of ordinary skill in the art would permit. *In re*
21 *ICON Health & Fitness, Inc.*, 496 F.3d 1374, 1379 (Fed. Cir. 2007); *In re*
22 *Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997). Properties of preferred
23 embodiments described in the specification which are not recited in a claim
24 do not limit the reasonable scope of the claim. *E-Pass Techs., Inc. v. 3Com*
25 *Corp.*, 343 F.3d 1364, 1369 (Fed. Cir. 2003).

The second paragraph of § 112 imposes two duties on an applicant. First, the applicant's claims must be definite. The definiteness requirement is met if "one skilled in the art would understand the bounds of the claim when read in light of the specification." *Exxon Research & Eng'g Co. v. United States*, 265 F.3d 1371, 1375 (Fed. Cir. 2001). A claim is indefinite if the language of the claim is susceptible of no reasonable interpretation. *Id.* A claim under examination susceptible of more than one reasonable interpretation may be indefinite if the scope of the claim differs significantly depending on which of the reasonable interpretations one adopts. *Ex Parte Miyazaki*, 89 USPQ2d 1207, 1211-12 (BPAI 2008). Breadth does not imply indefiniteness. *In re Miller*, 441 F.2d 689, 693 (CCPA 1971).

The second paragraph of § 112 also imposes the duty to draft claims which "particularly point out and distinctly [claim] *the subject matter which the applicant regards as the invention.*" [Emphasis added.] Nevertheless, the subject matter set out in the claims must be presumed to be that which the applicant regards as the invention. *In re Moore*, 439 F.2d 1232, 1235 (CCPA 1971). The Examiner bears the burden of proving that the applicant has not complied with this duty.

ANALYSIS

The absence of any recitation of a plunger actuator or an equivalent structure from claim 55 affects the breadth of the claim but not the definiteness of the claim. Although ambiguity may imply indefiniteness, *Miyazaki*, 89 USPQ2d at 1211-12, the possibility that one of ordinary skill in the art might use structure other than a plunger actuator to cause actuator

1 movement when the cap, in the first position, is depressed in a generally
2 radial direction does not imply that the scope of claim 55 is ambiguous.

3 As the Examiner concedes, cams, linkages and even electronic
4 solenoids could possibly be used to cause actuator movement. (Ans. 8-9.)
5 These alternatives imply that the use of a plunger actuator to cause actuator
6 movement is not an inherent feature of the subject matter of claim 55. One
7 of ordinary skill in the art would have no reason to read such a plunger
8 actuator into claim 55. Even assuming, as the Examiner reasons, that one of
9 ordinary skill in the art “would be left to guess which of a multitude of
10 mechanical elements could possibly be used to perform the functions
11 necessary” to cause actuator movement (*see* Ans. 9), this assumption relates
12 to the engineering choices required to implement the claimed subject matter
13 and not to the ability of one of ordinary skill in the art to determine the legal
14 metes and bounds measured off by the language of the claim.

15 The Examiner cites *In re Collier*, 397 F.2d 1003 (CCPA 1968) as
16 support for the rejection of claim 55 under the second paragraph of § 112.
17 In *Collier*, our reviewing court construed the applicant’s claim as reciting
18 “nothing more than a bare combination of a crimpable perforated ferrule and
19 a ground wire, regardless of particular relationships.” *Id.* at 1005. Despite
20 the breadth of the claim, the applicant argued patentability based on
21 structural relationships between the recited elements. Our reviewing court
22 agreed with the Board that the applicant’s arguments demonstrated that the
23 claim did not recite the subject matter which the applicant regarded as the
24 invention. *Id.*

25 Here, the Appellant appears to have consistently argued that the
26 plunger actuator is not part of the subject matter recited in claim 55. (*See*,

1 *e.g.*, App. Br. 6-7.) As the Appellant points out (*see* Reply Br. 3), the
2 Abstract and Summary of the Invention sections of the Appellant's
3 Specification do not mention the plunger actuator as an element of what the
4 Appellant most broadly conceives to be the invention. The Examiner
5 provides no persuasive evidence that the subject matter of claim 55 is not
6 what the Appellant regarded as the invention. In the absence of such
7 evidence, claim 55 is presumed to recite the invention as the Appellant
8 regards it.

9 Claim 75 recites a tactical defense device including a slidably
10 insertable sleeve for holding a pressurized spray cartridge. The Appellant
11 does not identify any formal definition of the term "slidably insertable" in
12 the Specification. The ordinary usage of the term "slidably insertable" is
13 sufficiently broad to include a sleeve having an outer diameter that enables
14 the sleeve to be slidably inserted (that is, inserted by sliding) within a
15 cylindrical body of the device. This ordinary usage is consistent with the
16 usage of the term "slidably insertable" in the disclosure of the Specification.
17 (*See, e.g.*, Spec. 7, para. 0044.) As the Examiner points out (*see* Ans. 10),
18 claim 75 does not recite that the sleeve must be capable of sliding after the
19 sleeve is inserted.

20 The Examiner finds that DeLucia's sleeve 46 corresponds to the
21 sleeve recited in claim 75. (Ans. 5 and 6.) As the Examiner points out, the
22 sleeve 46 has an outer diameter smaller than the inner diameter of the
23 elongated tubular portion 14. (FF 6.) Consequently, the outer diameter of
24 the sleeve 46 enables the sleeve 46 to be slidably inserted within the
25 elongated tubular portion 14 of DeLucia's device. In other words, DeLucia
26 discloses a device including a slidably insertable sleeve for holding a

1 propellant capsule or pressurized spray cartridge 44. Even though
2 DeLucia's sleeve 46 is riveted to the elongated tubular portion 14 after the
3 sleeve is inserted into the elongated tubular portion, the sleeve 46 is slidable
4 as it is being inserted.

5 Claim 78 recites a device including a guide pin for guiding movement
6 of an actuator button. Claim 78 depends from claim 77, which recites that
7 the actuator movement is caused by depression of the actuator button in a
8 generally radial direction. The Examiner finds that DeLucia's push button
9 122 corresponds to the actuator button recited in claim 78 (Ans. 5); that
10 DeLucia's slide block 130 corresponds to the recited actuator (*Id.*); and that
11 either DeLucia's plunger 124 or DeLucia's optic rod 138 corresponds to the
12 guide pin recited in claim 38. (Ans. 6.) As the Appellant argues (App. Br.
13 11-12; Reply Br. 6), neither the plunger 124 nor the optic rod 138 appears to
14 guide the movement of the push button 122 in a generally radial direction.
15 (FF 18.) In fact, neither the plunger 124 nor the optic rod 138 contact the
16 push button 122 so as to enable either of them to guide the path of
17 movement of the push button 122. (FF 17.) Even assuming for purposes of
18 this appeal only that either the plunger 124 or the optic rod 138 guides the
19 movement of the slide block or actuator 130 (*see* Ans. 11), the capacity to
20 guide the movement of the slide block 130 would not correspond to a
21 capacity to guide movement of the push button or actuator button 122.
22 Neither the plunger 124 nor the optic rod 138 is a guide pin as recited in
23 claim 78.

24 Claims 81, 82, 84, 85 and 91 recite a device including a nozzle plate
25 supported within the forward portion of a dispenser and defining a discharge
26 orifice. The Examiner finds that DeLucia's lens 25 corresponds to the

1 recited nozzle plate and that the discharge orifice 66 defined by DeLucia's
2 discharge tube 68 corresponds to the recited discharge orifice. (Ans. 10.)
3 The Examiner provides no explanation how DeLucia's lens 25 "defines" the
4 orifice 66. Figure 1 of DeLucia depicts the discharge tube 68 which defines
5 the orifice 66 as being positioned radially outwardly from the lens 25. (FF
6 12.) Therefore, DeLucia's lens 25 is not a nozzle plate which defines a
7 discharge orifice.

8 9 CONCLUSIONS

10 The Appellant has shown that the Examiner erred in concluding that
11 claim 55 fails to particularly point out and distinctly claim the subject matter
12 which the Appellant regards as the invention. Therefore, the Appellant has
13 shown that the Examiner erred in rejecting claim 55 and its dependent
14 claims 56, 59-61 and 64-73 under 35 U.S.C. § 112, second paragraph, as
15 being indefinite.

16 The Appellant has not shown that the Examiner erred in finding that
17 DeLucia discloses a slidingly insertable sleeve for holding a pressurized
18 spray cartridge as recited in claim 75. The Examiner has articulated
19 reasoning with some rational underpinning sufficient to support the
20 conclusion that the subject matter of claim 75 and grouped claims 76, 77, 79,
21 83 and 87-90 would have been obvious from the combined teachings of
22 DeLucia and Parsons. The Appellant has not shown that the Examiner erred
23 in rejecting claims 75-77, 79, 83 and 87-90 under § 103(a) as being
24 unpatentable over DeLucia and Parsons.

25 The Appellant has shown that the Examiner erred in finding that
26 DeLucia discloses a guide pin for guiding movement of an actuator button

1 caused by depression of the actuator button in a generally radial direction as
2 recited in claim 78. The Examiner has not articulated reasoning with some
3 rational underpinning sufficient to support the conclusion that the subject
4 matter of claim 78 would have been obvious from the combined teachings of
5 DeLucia and Parsons. The Appellant has shown that the Examiner erred in
6 rejecting claim 78 under § 103(a) as being unpatentable over DeLucia and
7 Parsons.

8 The Appellant has shown that the Examiner erred in finding that
9 DeLucia discloses a nozzle plate which is supported within the forward
10 portion of the dispenser and which defines a discharge orifice as recited in
11 claims 81, 82, 84, 85 and 91. The Examiner has not articulated reasoning
12 with some rational underpinning sufficient to support the conclusion that the
13 subject matter of claim 91; its dependent claims 86 and 96-102; and claims
14 81, 82, 84 and 85 would have been obvious from the combined teachings of
15 DeLucia and Parsons. The Appellant has shown that the Examiner erred in
16 rejecting claims 81, 82, 84-86, 91 and 96-102 under § 103(a) as being
17 unpatentable over DeLucia and Parsons.

18
19 **DECISION**

20 We AFFIRM the Examiner's decision rejecting claims 75-77, 79, 83
21 and 87-90.

22 We REVERSE the Examiner's decision rejecting claims 55, 56, 59-
23 61, 64-73, 78, 81, 82, 84-86, 91 and 96-102.

24 No time period for taking any subsequent action in connection with
25 this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R.
26 § 1.136(a)(1)(iv) (2007).

AFFIRMED-IN-PART

mls

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